

REMARKS

Applicants have carefully studied the Office Action dated October 2, 2000 and the application. It is submitted that no new matter has been added by this Amendment.

Introduction

This patent specification discloses an optical recording medium in which: (1) an information track groove is separated by a partition wall from the preformat phase pits for that track; and (2) the information track grooves and their phase pits have the same depth. An example is illustrated in Figs. 1A-1C, where the phase pits encode information not for the information track groove with which they are physically connected but for the information track groove to the left, from which they are separated by a partition wall. As discussed in the specification, such structure significantly improves performance as compared with known prior art.

Applicants were unable to find such a structure in the prior art applied against the claims, as discussed in more detail below with respect to specific claim language.

Applicants have amended claim 1, 4, 7-9, 12 and 13 only to correct typographical errors and clarify antecedents. New claim 18 is a method claim drafted in response to the Examiner's suggestion to convert claims 6 and 7 to a fully method format.

Title

✓ Applicants have proposed a new title.

Drawings

The Examiner's approval is requested for the proposed changes indicated in red on the copy of Figs. 17A - 17C submitted under a separate Letter Re Drawing Corrections.

Applicants have labeled Figs. 17A-17C prior art.

Section 112 Issues

Applicants have carefully considered the rejection of claims 1-17 under the second paragraph of Section 112 as being vague and indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention, but submit that the claims do differ from each other sufficiently to justify each claim.

In the independent claims, claim 1 differs from claim 8 by reciting information tracks without specifying the grooves recited in claim 8. As another example, claim 1 specifies that a first phase pit encodes information for the first information track but is connected to the second information track and extends toward but does not reach the first information track, while claim 8 does not specify whether or not a phase pit for one track is connected to an adjacent track. Claim 1 differs from claim 13 also by reciting information tracks without specifying the grooves recited in claim 13. As another example, claim 1 recites that the first phase pit and the first information track have substantially equal depths while claim 13 recites that the grooves and phase pits are equally deep. Claim 8 also differs from claim 13, for example by reciting partition walls separating adjacent tracks while claim 13 recites that the phase pits are separated from the track for which they encode information.

It is submitted that the dependent claims differ at least by incorporating the subject matter of the respective independent claims. Of course, they also differ by more specific recitations contained therein.

Regarding the rejection of method claims 6 and 7 as dependent from a product claim, applicants have canceled claim 6 in favor of a new, independent method claim 18 combining features of claims 1 and 6, and have made claim 7 dependent on this new claim 18.

Section 102 Issues

Applicants have carefully considered the material referred under the heading Background Art in the patent specification but have been unable to find in anyone item of prior art a number of features recited in the claims of record and, therefore, respectfully traverse the rejection.

Regarding claim 1, applicants were unable to find in any one prior art item in this material a teaching of an optical information recording medium having a combination of features in which: (1) a first phase pit encodes information for the first track; (2) the first phase pit is connected to the second information track; (3) the phase pit extends radially from the second information track toward the first information track but does not reach it; (4) a partition wall separates the first phase pit from the first information track; and (5) the first phase pit and the first information track are equally deep. For example, the proposals illustrated in Figs. 11A and 14A do not have such a partition wall, and the proposal illustrated in Fig. 17A does not have equal depth of a first phase pit and a first information track.

Similarly, with respect to claim 8 applicants were not able to find in any one prior art

item of the same material a combination of features in which: (1) the grooves and phase pits are equally deep; and (2) phase pits encoding preformat information for a given information track are radially spaced from the groove forming the given information track by partition walls.

Still similarly, with respect to claim 13, applicants were not able to find in any one item of the same material a teaching of a combination of features in which: (1) phase pits encoding preformat information for a given track are radially spaced from that track and separated therefrom by a partition wall; and (2) the grooves and phase pits are equally deep.

Applicants respectfully submit that these claimed features are structural recitations (e.g., partition wall and equal depth) rather than method limitations flowing from the products referred to under the heading Background Art and, therefore, these products do not anticipate the relevant claims under Section 102.

New claim 18 is a method claim that incorporates features of claim 1 and is submitted to overcome the Section 102 rejection at least for this reason. In addition, it incorporates novel features of now canceled claim 6. Similar considerations should apply to claim 7, now a method claim depending from new claim 18.

Section 103 Issues Regarding Dependent Claims 2-5, 9-12, and 14-17

Applicants carefully considered the rejection under Section 103 of all the dependent claims, but were unable to find in the applied prior art either the subject matter of the independent claims (not rejected under Section 103) or their dependent claims.

The material referred to under the heading Background Art is discussed above in

connection with the Section 102 rejection. Applicants were unable to find in that material, even when taken in any permissible combination not based on hindsight, a teaching or suggestion of at least the claim features discussed in connection with the Section 102 rejection.

In addition, applicants were unable to find a teaching or suggestion of these claimed features in the secondary applied references, Tsuchiya, et al. U.S. Patent 5,477,527 and Mieda, et al. U.S. Patent 5,673,250.

Applicants were unable to find a teaching of phase pits and partition walls as recited in the rejected claims in Tsuchiya, et al. (or in Sugaya U.S. Patent 5,459,712) as understood.

In Mieda, et al., the address pits 3 and discrimination pits 11 appear to be different in nature from the phase pits recited in the claims but, in addition, there appears to be no teaching of a separation between an information track (G or L) and its address pit, as address pits 3 encroach on both the groove and the land that carry information tracks for which address pits 3 encode address information. Discrimination pits 11 (Fig. 2) also are entirely within a respective land carrying an information track.

Thus, although Mieda, et al. illustrate in Figs. 3-5 a variety of pit widths and depth, they are for pits different in nature, structure and function from those recited in the claims of record, e.g., these Figs. 3-5 pertain to address pits and discrimination pits that are not separated by partition walls from the respective information tracks for which they encode information.

Applicants have reviewed Fukuoka, et al. U.S. Patent 5,883,879 and Morita U.S. Patent 5,504,734, which were cited but not applied against the claims, and were unable to find therein teachings of phase pits and information tracks of the type recited in the claims of

record.

Accordingly, applicants respectfully submit that the claims of record are patentably distinct from the applied prior art and respectfully request early Office Action to that effect.

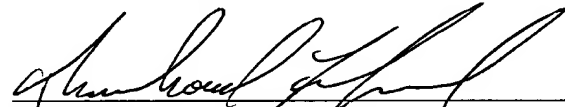
The Office is hereby authorized to charge any fees that may be required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition, and the Commissioner is authorized to charge the requisite fees to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Entry of this amendment and allowance of this application are respectfully requested.

Respectfully submitted,



RICHARD F. JAWORSKI

Reg. No. 33,515

Attorney for Applicants

Cooper & Dunham LLP

Tel.: (212) 278-0400